## 4.2.J. 05130203100.

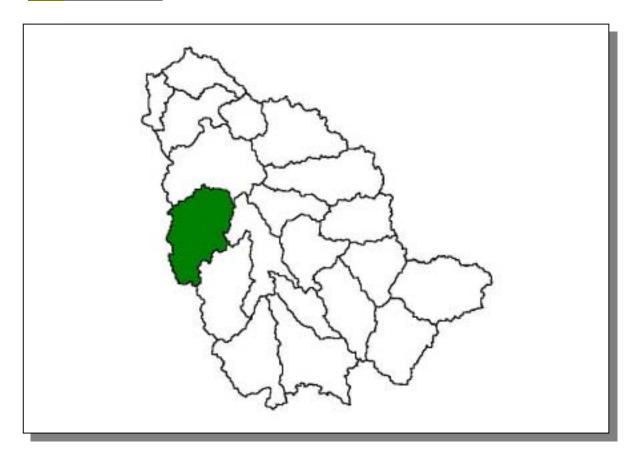


Figure 4-54. Location of Subwatershed 05130203100. All Stones HUC-14 subwatershed boundaries are shown for reference.

## 4.2.J.i. General Description.

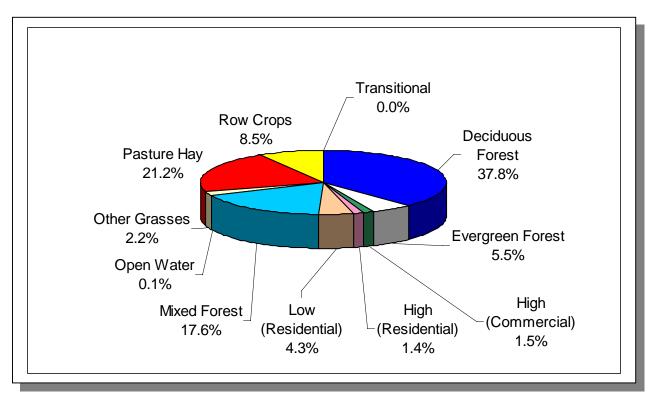


Figure 4-55. Land Use Distribution in Subwatershed 05130203100. More information is provided in Stones-Appendix IV.

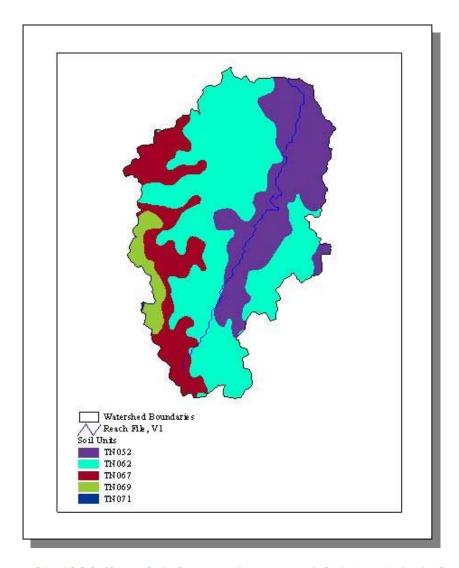


Figure 4-56. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 05130203100.

| STATSGO MAP | PERCENT | HYDROLOGIC | PERMEABILITY | SOIL | ESTIMATED    | SOIL        |
|-------------|---------|------------|--------------|------|--------------|-------------|
| UNIT ID     | HYDRIC  | GROUP      | (in/hour)    | рН   | SOIL TEXTURE | ERODIBILITY |
| TN052       | 0.00    | В          | 1.23         | 5.46 | Silty Loam   | 0.39        |
| TN062       | 0.00    | С          | 0.98         | 4.40 | Clayey Loam  | 0.26        |
| TN067       | 2.00    | С          | 2.69         | 5.51 | Silty Loam   | 0.35        |
| TN069       | 0.00    | С          | 2.06         | 5.36 | Loam         | 0.34        |
| TN071       | 0.00    | С          | 2.37         | 5.70 | Silty Loam   | 0.33        |

Table 4-59. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 05130203100. More information is provided in Stones-Appendix IV

|   |                                     | UNTY<br>ILATION                      |                          | ESTIM<br>POPUL<br>IN WATE      | ATION                          | % CHANGE                    |
|---|-------------------------------------|--------------------------------------|--------------------------|--------------------------------|--------------------------------|-----------------------------|
| County                                    | 1990                                | 1997 Est.                            | Portion of Watershed (%) | 1990                           | 1997                           |                             |
| Rutherford<br>Williamson<br><b>Totals</b> | 118,570<br>81,021<br><b>199,591</b> | 159,987<br>111,453<br><b>271,440</b> | 9.33<br>0.73             | 11,062<br>593<br><b>11,655</b> | 14,926<br>816<br><b>15,742</b> | 34.9<br>37.6<br><b>35.1</b> |

Table 4-60. Population Estimates in Subwatershed 05130203100.

|                     |                          |                 | NUMBER OF HOUSING UNITS |                 |                | 3       |
|---------------------|--------------------------|-----------------|-------------------------|-----------------|----------------|---------|
| Populated Place     | County                   | Population      | Total                   | Public<br>Sewer | Septic<br>Tank | Other   |
| La Vergne<br>Smyrna | Rutherford<br>Rutherford | 7,499<br>13,647 | 2,810<br>5,312          | 2,299<br>4,959  | 451<br>346     | 60<br>7 |
| Total               |                          | 21,148          | 8,122                   | 7,258           | 797            | 67      |

Table 4-61. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 05130203100.

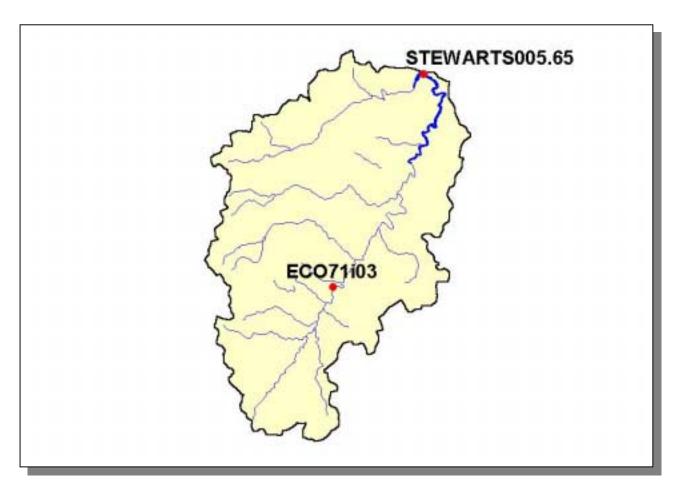


Figure 4-57. Location of STORET Monitoring Stations in Subwatershed 05130203100. More information is provided in Stones-Appendix IV.

## 4.2.J.ii. Point Source Contributions.

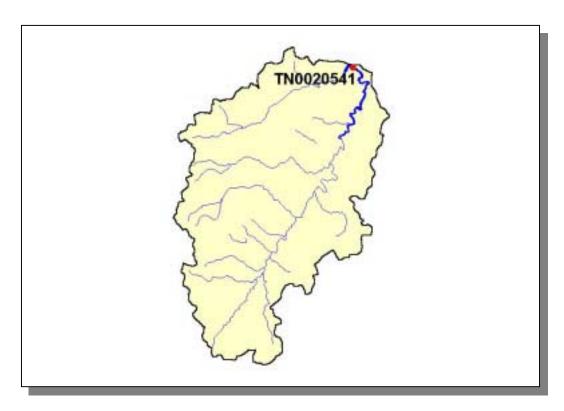


Figure 4-58. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 05130203100. More information, including the names of facilities, is provided in Stones-Appendix IV.

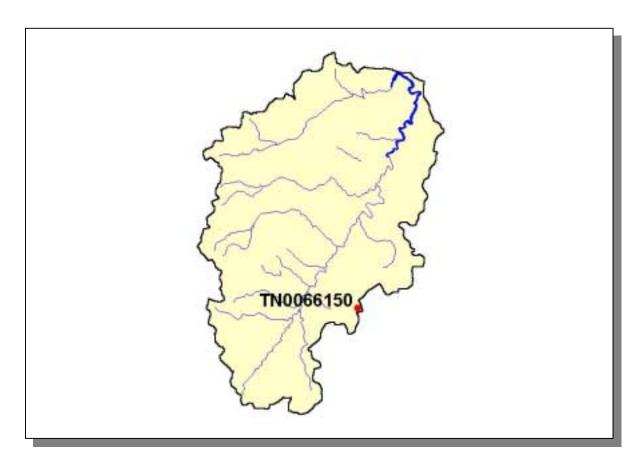


Figure 4-59. Location of Active Mining Sites in Subwatershed 05130203100. More details may be found in Stones-Appendix IV.

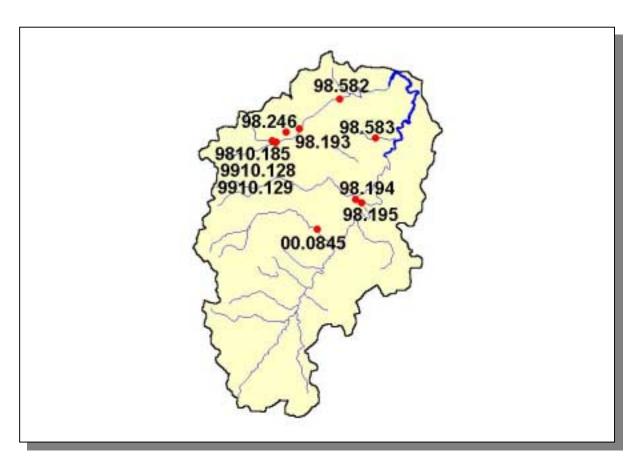


Figure 4-60. Location of ARAP Sites (Individual Permits) in Subwatershed 05130203100. More details may be found in Stones-Appendix IV.

4.2.J.ii.a. Dischargers to Water Bodies Listed on the 1998 303(d) List:

There is one facility discharging to water bodies listed on the 1998 303(d) list in Subwatershed 05130203100:

• TN 0020541 discharges to Stewart Creek @ RM 5.65

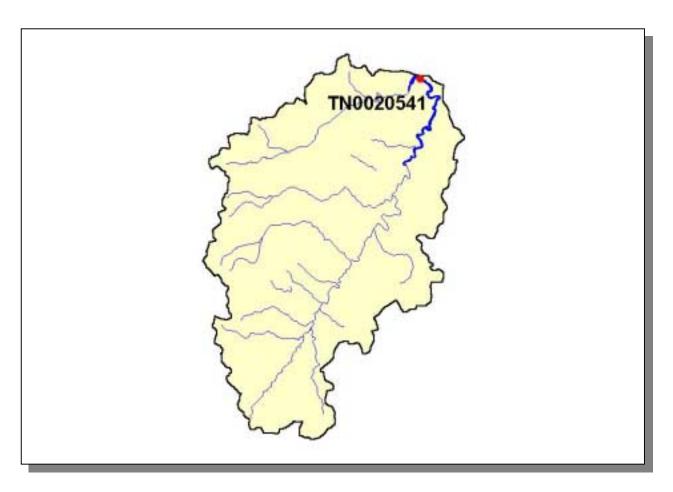


Figure 4-61. Location of NPDES Discharger to Water Bodies Listed on the 1998 303(d) List in Subwatershed 05130203100. The names of facilities are provided in Stones-Appendix IV.

| PERMIT#   | 7Q10 | 1Q20 | 30Q2 | QDESIGN |
|-----------|------|------|------|---------|
| TN0020541 | 0    | 0    | 0    | 5.2     |

Table 4-62. Receiving Stream Flow Information for NPDES Dischargers to Water Bodes Listed on the 1998 303(d) List in Subwatershed 05130203100. Data are in million gallons per day (MGD). Data were calculated using data in Flow Duration and Low Flows of Tennessee Streams Through 1992.

| PERMIT#   | CBOD <sub>5</sub> | NH <sub>3</sub> | FECAL | WET |
|-----------|-------------------|-----------------|-------|-----|
| TN0020541 | X                 | Χ               | X     | Χ   |

Table 4-63. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 05130203100.

## 4.2.J.iii. Nonpoint Source Contributions.

| LIVESTOCK (COUNTS) |        |          |          |      |       |
|--------------------|--------|----------|----------|------|-------|
| Beef Cow           | Cattle | Milk Cow | Chickens | Hogs | Sheep |
| 2,038              | 4,212  | 247      | 6        | 121  | 45    |

**Table 4-64.** Summary of Livestock Count Estimates in Subwatershed 05130203100. According to the Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

|            | INVEN                        | ITORY                        | REMOVAL RATE                          |                                   |  |
|------------|------------------------------|------------------------------|---------------------------------------|-----------------------------------|--|
| County     | Forest Land (thousand acres) | Timber Land (thousand acres) | Growing Stock<br>(million cubic feet) | Sawtimber<br>(million board feet) |  |
| Rutherford | 155.7                        | 155.7                        | 0.4                                   | 0.9                               |  |
| Williamson | 142.0                        | 142.0                        | 1.0                                   | 3.3                               |  |
| Total      | 297.7                        | 297.7                        | 1.4                                   | 4.2                               |  |

Table 4-65. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 05130203100.

| CROP                                  | TONS/ACRE/YEAR |
|---------------------------------------|----------------|
| Non Agricultural Land Use             | 0.00           |
| Berry (Horticultural)                 | 0.47           |
| Corn (Row Crops)                      | 3.73           |
| Soybeans (Row Crops)                  | 2.86           |
| Cotton (Row Crops)                    | 4.79           |
| Grass (Hayland)                       | 0.20           |
| Legume (Hayland)                      | 0.37           |
| Legume,Grass (Hayland)                | 0.47           |
| Grass (Pastureland)                   | 0.87           |
| Legume (Pastureland)                  | 0.13           |
| Grass, Forbs, Legumes (Mixed Pasture) | 0.53           |
| Forest Land (Grazed)                  | 0.00           |
| Forest Land (Not Grazed)              | 0.00           |
| Farmsteads and Ranch Headquarters     | 0.46           |
| Conservation Reserve Program Land     | 0.27           |
| Tobacco (Row Crops)                   | 6.75           |
| Wheat (Close Grown Cropland)          | 1.27           |
| Other Cropland not Planted            | 6.46           |
| Other Land in Farms                   | 0.12           |

Table 4-66. Annual Estimated Total Soil Loss in Subwatershed 05130203100.